Title (en)

A VEHICLE RADAR SYSTEM ARRANGED FOR DETERMINING AN UNOCCUPIED DOMAIN

Title (de)

ZUR BESTIMMUNG EINER FREIEN DOMÄNE ANGEORDNETES KRAFTFAHRZEUGRADARSYSTEM

Title (fr)

SYSTÈME DE RADAR DE VÉHICULE CONÇU POUR DÉTERMINER UN DOMAINE INOCCUPÉ

Publication

EP 3182155 A1 20170621 (EN)

Application

EP 15200692 A 20151217

Priority

EP 15200692 A 20151217

Abstract (en)

The present disclosure relates to vehicle radar system (3) comprising at least one transceiver arrangement (7) arranged to generate and transmit radar signals (4), and to receive reflected radar signals (5). The radar signals form a plurality of sensing sectors, sensing bins (8a, 8b, 8c, 8d, 8e, 8f, 8g), that together form a transceiver coverage (9), For each sensing bin (8a, 8b, 8c, 8d, 8e, 8f, 8g) the radar system (3) is arranged to obtain a target angle (Õ) and a target range (r) to possible target objects (10a, 10b, 10c, 10d, 10e, 10f, 10g, 10e, 10f, 10g, 10h, 10i, 10j). The radar system (3) is further arranged to determine an unoccupied domain border (11) and a corresponding unoccupied domain (12) for the radar transceiver coverage (9). The present disclosure also relates to a corresponding method.

IPC 8 full level

G01S 13/42 (2006.01); **G01S 13/536** (2006.01); **G01S 13/931** (2020.01)

CPC (source: CN EP KR US)

G01S 13/42 (2013.01 - CN EP KR US); **G01S 13/536** (2013.01 - CN EP KR US); **G01S 13/931** (2013.01 - CN EP KR US); G01S 2013/93271 (2020.01 - EP US)

Citation (applicant)

US 7227474 B2 20070605 - ZORATTI PAUL K [US], et al

Citation (search report)

- [XYI] US 5758298 A 19980526 - GULDNER JURGEN [DE]
- [YA] US 6163252 A 20001219 - NISHIWAKI TAKESHI [JP]

Cited by

US11794865B1; US11436927B2; EP3657214A1; JP2021011263A; EP4119981A1; US10926855B2; US11257378B2; US11600184B2; US11373537B2; US11804137B1; US11198494B2; US11904996B2; US11403955B2; US11443637B2; US11862026B2; US11480966B2; US11702178B2; US12024273B1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3182155 A1 20170621; CN 108369271 A 20180803; CN 108369271 B 20220927; CN 115616554 A 20230117; JP 2019504303 A 20190214; JP 6713047 B2 20200624; KR 20180090856 A 20180813; US 11226407 B2 20220118; US 2018356508 A1 20181213; WO 2017103129 A1 20170622

DOCDB simple family (application)

EP 15200692 A 20151217; CN 201680074212 A 20161216; CN 202211236214 A 20161216; EP 2016081459 W 20161216; JP 2018528219 A 20161216; KR 20187019043 A 20161216; US 201616062434 A 20161216